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IS 6448 (1993): Diammonium phosphate [FAD 7: Soil Quality and Gertilizers]

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भारतीय मानक

डाइमोनियम फास्फेट — विशिष्ट

(दूसरा पुनरीक्षण)

Indian Standard

DIAMMONIUM PHOSPHATE — SPECIFICATION

(*Second Revision*)

UDC 631.859.13 : 631.841.7

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

**AMENDMENT NO. 1 NOVEMBER 2000
TO
IS 6448 :1983 DIAMMONIUM PHOSPHATE —
SPECIFICATION**

(Second Revision)

(Page 1, clause 3.4) — Insert the following clause after 3.4:

'3.5 Tolerance — The tolerance limit as indicated shall be applicable on the specified values:

<i>Nutrient</i>	<i>Tolerance</i>
Nitrogen	0.5 percent
Phosphorus	0.5 percent.'

(PCD 20)

AMENDMENT NO. 2 MAY 2012
TO
IS 6448 : 1983 DIAMMONIUM PHOSPHATE —
SPECIFICATION

(Second Revision)

[Page 2, clause 4.2(d)] — Substitute ‘Gross and net quantity in kg;’ for
‘Gross and net mass in kg;’.

(FAD 7)

Reprography Unit, BIS, New Delhi, India

Fertilizers Sectional Committee, PCD 20

FOREWORD

This Indian Standard (*Second Revision*) was adopted by the Bureau of Indian Standards, after the draft finalized by the Fertilizers Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council.

Diammonium phosphate is usually manufactured by the ammoniation of wet process phosphoric acid.

This standard was first published in 1971 and was subsequently revised in 1980. In the original standard there were two grades namely, 18-46-0 and 20-48-0, in first revision the grade 20-48-0 was dropped as it was not being produced in the country.

In this revision, in order to align with the specifications of 'the Fertilizer (Control) Order, 1957 and the Essential Commodities Act, 1955 of Government of India, a requirement for total nitrogen, all in ammoniacal form is being substituted for two separate requirements for total nitrogen and ammonical nitrogen. Requirement for moisture has been amended. A new requirement for urea has also been incorporated in line with FCO.

This standard is subject to the provisions imposed under Fertilizer Control Order wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***DIAMMONIUM PHOSPHATE — SPECIFICATION**
(Second Revision)**1 SCOPE**

This standard prescribes the requirements and the methods of sampling and test for diammonium phosphate and diammonium phosphate with urea.

2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard.

IS No.	Title
460 (Part 1) : 1985	Specifications for test sieves : Part 1 Wire cloth test sieves (<i>third revision</i>)
460 (Part 3) : 1985	Specification for test sieves : Part 3 Methods of examination of apertures of test sieves (<i>third revision</i>)
1070 : 1992	Reagent grade water—Specification (<i>third revision</i>)
5985 : 1985	Code of practice for handling and storage of bagged fertilizers
6092	Methods of sampling and test for fertilizers
6092 (Part 1) : 1985	Part 1 Sampling
6092 (Part 2) : 1985	Part 2 Determination of nitrogen
6092 (Part 3) : 1985	Part 3 Determination of phosphorus
6092 (Part 6) : 1985	Part 6 Determination of impurities

The above-mentioned standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated above.

3 REQUIREMENTS**3.1 Description**

The material shall be in the form of free-flowing granules.

3.2 Particle Size

Minimum 90 percent of the material shall pass through 4 mm IS Sieve and be retained on 1 mm IS Sieve. Not more than 5 percent shall be below than 1 mm size.

3.3 For particle size, the use of IS sieves conforming to IS 460 (Part 1) : 1985 is prescribed. Where IS Sieves are not available, other standard sieves as judged from aperture size may, be used. [See IS 460 (Part 3) : 1985].

3.4 The material shall also comply with the requirements given in Table 1.

4 PACKING AND MARKING**4.1 Packing**

The material shall be packed in the manner as

Table 1 Requirements for Diammonium Phosphate
(Clause 3.4)

Sl. No.	Characteristic	Requirement	Method of Test, Ref to Part and clause in IS 6092
(1)	(2)	(3)	(4)
i)	Total nitrogen, percent by mass, <i>Min</i>	18.0	7 of IS 6092 (Part 2) : 1985
ii)	Ammoniacal nitrogen form, percent by mass, <i>Min</i>	15.5	11 of IS 6092 (Part 2) : 1985
iii)	Total nitrogen in the form of urea percent by mass, <i>Max</i>	2.5	17 of IS 6092 (Part 2) : 1985
iv)	Neutral ammonium citrate soluble phosphates (as P_2O_5), percent by mass, <i>Min</i>	46.0	6, 7, 8, 9 of IS 6092 (Part 3) : 1985
v)	Water soluble phosphates as (P_2O_5), percent by mass, <i>Min</i>	41.0	7 of IS 6092 (Part 3) : 1985
vi)	Moisture, percent by mass, <i>Max</i>	1.5	4.3 of IS 6092 (Part 6) : 1985

agreed to between the purchaser and the supplier. Each bag shall be securely closed.

4.2 Marking

Each bag shall bear legibly and indelibly the following information :

- a) Name of the fertilizers;
- b) Indication of source of manufacture ;
- c) Percentage of nitrogen and phosphorus by mass;
- d) Gross and net mass in kg;
- e) Batch number, in code or otherwise, to enable the lot of manufacture to be traced back from records; and
- f) Any other information necessary under FCO.

4.2.1 The packages may also be marked with the Standard Mark.

5 HANDLING AND STORAGE

Factors to be borne in view in the handling and storage of the material shall be as prescribed in IS 5985 : 1985.

6 SAMPLING

6.1 Representative samples of the material shall

be drawn as prescribed in IS 6092 (Part 1) : 1985.

6.2 Number of Tests

Test for all the requirements given in 3 shall be conducted on the composite test sample.

6.3 Criteria for Conformity

For declaring the conformity of the lot to the requirements of this specification, the test results on the composite test sample shall satisfy all the requirements specified in 3.

7 TEST METHODS

Tests for the requirements listed under 3 shall be carried out according to methods prescribed in IS 6092 (Part 2) : 1985, IS 6092 (Part 3) : 1985 and IS 6092 (Part 6) : 1985. Reference to relevant parts and clauses is given in col 4 of Table 1.

8 QUALITY OF REAGENTS

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070 : 1992) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

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Amendments Issued Since Publication

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